surgery is the standard treatment for potentially resectable esophageal cancer. Patients aged over 75 years or with a tumor length of more than 8 cm were not included in the CROSS trial. In clinical practice, these patients are also treated according to the CROSS strategy, when considered fit enough. The aim of this study is to analyze the effectiveness and toxicity of preoperative CRT followed by resection for patients who do not meet the CROSS criteria because of age or tumor length.

Materials and Methods; patients treated from 2005 to November 2013 in the Esophageal Centre East Netherlands according to the CROSS trial were included. Patients were divided into two groups; group I 'meeting criteria CROSS' (n=110) and group II '>75 years and or tumor length > 8 cm' (n=16). Primary endpoints were differences in disease specific and overall survival and secondary endpoints were toxicity, treatment interruptions and residual tumor volume after CRT.

Results: in this small population, the effectiveness did not seem to differ between patients who did and did not meet the inclusion criteria of the CROSS trial. Similar disease specific survival rates were found, although overall survival was shorter for patients who were not eligible for the CROSS trial (3.6 vs. 6.2 years, p=0,02). Among a subgroup of patients aged over 75 years (n=9), more adverse effects of CRT were reported (89% vs 65%, relative risk 1,4 (95% CI 1,1-1,8)), as were postoperative complications (100% vs 65%, relative risk 1,5 (95% CI 1,3-1,8)). Also, treatment was more often interrupted among older patients 33% vs 6%(relative risk 5,8 (95% CI 1,7-19,5)). In the subgroup tumor length > 8 cm (n=7) we did not find a difference in toxicity. However, a lower percentage residual tumor after CRT was found in the subgroup >75 years compared to group I (50% vs 19%, relative risk 0,2 (95% CI 0,1-1,0)).

Conclusions: we found no obvious differences in the effectiveness of preoperative CRT followed by resection between patients who did and did not meet the inclusion critera of the CROSS trial based on age and tumor length. Patients aged >75 years have an increased risk of adverse effects and postoperative complications.

Discussion: our findings based on a retrospective evaluation of a small number of patients should lead to further prospective research.

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The most important prognostic factor in elderly patients with glioblastoma multiforme: diameter of residual tumor

G. Türkkan[1], V. Yürüt-Çaloglu[1], M. Caloglu[1], S. Uzunoglu[2], N. Kiliç-Durankus[1], D. Cakir-Nurlu[1]
[1]*Trakya University Faculty of Medicine, Radiation Oncology, Edirne, Turkey*
[2]*Trakya University Faculty of Medicine, Medical Oncology, Edirne, Turkey*

Purpose/Objective: Glioblastoma multiforme (GBM) is the most common malignant primary brain tumor. Depending on the increase of elderly patient population, the incidence of GBM in elderly patients is rising and identification of prognostic factors is very important for treatment management. 50 years of age is considered as a prognostic limit for malignant gliomas. In this study, we aimed to evaluate clinical prognostic factors in patients aged 50 and older.

Materials and Methods: Clinical prognostic factors of 73 GBM patients aged 50 and older, are evaluated retrospectively.

Results: Mean survival was 5.2 months (0.1- 33.23 months). 30 patients (41.1%) were female and 43 patients (58.9%) were male. Of the 73 patients, 36 (49.3%) were in the range of 50 to 59 years old and 37 (50.7%) were aged 60 and above. Primary tumors were confined to a single lobe in 36 patients (49.3%). Nearly total resection of tumor had been performed in 26 patients (35.6%). Average values of tumor diameter and residual tumor diameter were 4.82 cm (3-8 cm) and 1 cm (0-8cm), respectively. 31 patients (42.4%) had WHO performance score of 0 or 1. In univariate analysis, factors that affect the survival negatively were: poor WHO performance status (p=0.001), ≥60 age (p=0.04), ≥1cm residual tumor diameter (p=0.012), ≥40 days of Radiotherapy (RT) period (0.002),

Conclusions: Standard treatment of GBM consists of surgery, radiotherapy, and chemotherapy with temozolomide. But optimal treatments cannot be performed in all elderly patients. In this study, it has been determined that the maximal resection (as much as possible) of the tumor affects significantly the survival in elderly patients.

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Stereotactic Body Radiation Therapy for lung cancer in the elderly

P. Antonini[1], L.M. Larrea[1], E.A. Lopez[1], V. Gonzalez[1], M.C. Baños[2], J. Bea[2], M.A. Garcia[2]
[1]*Clinica Virgen del Consuelo, Radiation Oncology, Valencia, Spain*
[2]*Clinica Virgen del Consuelo, Radiophysics, Valencia, Spain*

Purpose/Objective: To evaluate technique, toxicity and results of stereotactic body radiation therapy (SBRT) for primary or metastatic lung tumors in patients over 75 years old.

Materials and Methods: Between 2002 and 2014, 73 elderly patients (61 men and 12 women) with 85 lung tumors: 65 primary and 20 oligometastatic were treated using SBRT. Treatment outcomes, toxicity and technique were analyzed retrospectively.

SBRT involved: Computed tomography (CT) slow-scan simulation with immobilization devices, contouring the target volume in 3 sets of CTs, superimposing the volumes in the planning system to represent the internal target volume (ITV), dose calculation using heterogeneity correction and assuring very conformal dose distribution and a steep fall-off of the radiation dose outside treatment volume and radiation delivery with multiple static non-coplanar beams and arc therapy. The prescribed dose was ablative, either 3 fractions of 14-16 Gy each or a single 30-Gy fraction (corresponding to biologically equivalent doses > 100). Dose constraints were set for surrounding organs at risk. Toxicity and radiologic response were assessed in follow-up visits, using conventional criteria (RTOG, EORTC scores and radiologist reviewed reports). Survival rates and cumulative incidences of toxicities were calculated by actuarial and Kaplan-Meier method.

Results: Median patient age was 80 years (75-88). Before treatment all patients had Karnofsky Performance Scores